

Amendments to the Drawings:

The attached replacement drawing sheets makes changes to Figs. 1 and 2 and replace the original sheets with Figs. 1 and 2.

Attachment: Replacement Sheets

REMARKS

Claims 1-7, 9, 13 and 14 are pending in this application. By this Amendment, claims 1 and 13 are amended, claims 8 and 10-12 are canceled, the specification is amended to correct informalities, and Figs. 1 and 2 are amended to include "Prior Art" in the legend. No new matter is added by this Amendment. Support for the features added to claims 1 and 13 is found at, for example, Figs. 5A, 5B, 6, 11A and 11B.

I. Information Disclosure Statement

The Office Action asserts that the Information Disclosure Statement filed on July 24, 2003 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP §609 because Attorney docket numbers are used to represent what appears to be pending applications, and no copies of the documents have been submitted. However, as evidenced by the attached filing receipt, 3 references were submitted with the July 24, 2003 IDS.

As a courtesy to the Examiner, Applicants submit herein a revised form PTO-1449 including U.S. Publication Nos. and U.S. application serial numbers that correspond to the applications cited on the July 24, 2003 IDS. Consideration of the references cited therein is requested.

II. Drawings

The Office Action requires that Figs. 1 and 2 be designated by a legend such as --Prior Art--. Figs. 1 and 2 are amended to include "Prior Art" in the legend. Applicants submit that the requirements of the Patent Office have been met.

III. Specification

The disclosure is objected to for a number of informalities. All but one of the informalities identified by the Examiner are corrected as suggested by the Examiner. In particular, the Office Action asserts that at page 4, line 27 of the specification a closed parenthesis mark appears with no apparent opening parenthesis mark to which it belongs.

However, after review of the specification, Applicants could not locate a closed parenthesis mark with no apparent opening parenthesis mark.

Withdrawal of the objection is requested.

III. Rejection Under 35 U.S.C. §101

Claims 10-12 are rejected under 35 U.S.C. §101. Claims 10-12 are herein canceled; thus, this rejection is moot.

IV. Rejection Under 35 U.S.C. §102(b)

Claims 1-14 are rejected under 35 U.S.C. §102(b) over U.S. Patent No. 5,978,591 (Bartholomew). This rejection is respectfully traversed.

Claims 8 and 10-12 are canceled. Thus, the rejection of claims 8 and 10-12 is moot.

The Office Action cites col. 7, lines 26-48 and asserts that Bartholomew discloses the features of claims 1 and 13. However, the cited portion of Bartholomew discloses that reprogramming data from the host computer (PC) is downloaded to the dual port memory 22 through a first bus at PCMCIA16. See Fig. 3 of Bartholomew. Subsequently, upon the disconnection of the host computer from the first bus, installation of downloaded reprogramming data starts.

Thus, according to Bartholomew, the first bus functions as the bus to which the reprogramming data is transferred as well as the bus at which the disconnection of the host computer is detected. Furthermore, the detection of whether or not the host computer has been disconnected from the first bus occurs after the reprogramming data has been downloaded through the first bus.

According to claims 1 and 13, information written into the non-volatile memory is transferred through the first bus. Moreover, the detection of whether the device is connected or disconnected occurs at the second bus (not at the first bus); and the detection of whether or

not the device is connected to the second bus occurs before information is downloaded through the first bus.

According to the disclosure of Bartholomew, a circuit which transfers data through the first bus is provided, but Bartholomew does not disclose an interface circuit which executes interface processing between the device which is connected to the second bus.

With a data transfer control device, as described in the present specification with reference to Figs. 5A and 5B, the device information and information concerning data transfer control programs are downloaded to the non-volatile memory 44 of the data transfer control device 10, with the device 100 connected to the second bus 2. This is because the target of the host device (such as PC) identification (i.e., the target of data transfer) is always the device 100 connected to the second BUS 2, not the data transfer control device 10. Therefore, the method shown in Fig. 5B requires the information to be downloaded to the non-volatile memory 44 after the fabrication step of mounting the device 100 on the circuit board 9 of the data transfer control device 10, and connecting the device 100 to the data transfer control device 10 through the second BUS 2. Thus, it is not possible to write the device information during the first part of the fabrication process.

Furthermore, as shown in Fig. 11A of the present application, as soon as it is determined that the device is disconnected from the second BUS 2, the rewriter activation section automatically causes the rewriter to start processing. The activated rewriter automatically downloads the device information and information concerning the data transfer control program to the non-volatile memory 44 through the first BUS 1.

Therefore, as shown in Fig. 11A of the present application, before the device 100 is connected to the data transfer control device 10 through the second BUS 2, information may be automatically downloaded to the non-volatile memory 44 of the data transfer control device 10. Subsequently, as shown in Fig. 11B of the present application, the device 100 is

mounted on the circuit board 9 so that the data transfer control device 10 and the device 100 may be connected thorough the second BUS 2. Therefore, it is possible to download information to the non-volatile memory 44, before the fabrication step of connecting the device 100 to the data transfer control device 10.

Bartholomew fails to disclose these features.

That is, Bartholomew fails to disclose a data transfer control device for data transfer through a bus comprising a circuit which performs data transfer through a first bus, the first bus transferring data conforming to a first interface standard, an interface circuit which performs interface processing with a device connected to a second bus, the second bus transferring data conforming to a second interface standard, a non-volatile memory which stores at least one of device information and data transfer control program information, a rewriter which loads and writes information transferred through the first bus into a rewrite area of the non-volatile memory, and a rewriter activation section which causes the rewriter to start processing when the second bus is detected to have no connection to any device, as recited in claim 1.

Bartholomew also fails to disclose a method of fabricating an electronic instrument having a data transfer control device and a second device connected to a second bus of the data transfer control device, the method comprising transferring data through a first bus, the first bus transferring data conforming to a first interface standard, performing interface processing with the second device connected to the second bus, the second bus transferring data conforming to a second interface standard, storing at least one of device information and data transfer control program information in a non-volatile memory, disconnecting the second device from the second bus to start rewriter processing that is activated when the second device is disconnected from the second bus, loading and writing information transferred through the first bus into a rewrite area by the rewriter processing, and connecting the second

device to the second bus after the writing of the information into the rewrite area, as recited in claim 13.

For the foregoing reasons, Bartholomew fails to anticipate the subject matter of claims 1 and 13, as well as the claims depending therefrom. Withdrawal of the rejection is respectfully requested.

V. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the pending claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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JAO:LMS/eks

Attachments:

Replacement Sheets
July 24, 2003 IDS Filing Receipt
Revised form PTO-1449

Date: February 21, 2006

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